BRUHAT BANGALORE MAHANAGARA PALIKE

Project: Improvements to Drains and Asphalting to Roads at Balaji Layout Near Railway Gate in Ward No 06 Byatarayanapura Sub Division

							Construction Cost:		5000000.00
Sl. No.	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
1	KSRRB M300-1. Earth work excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface levelled and sides neately dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specification. MORTH / Chapter 3 (P.No.133, I.No.19.1 of PW, P&IWTD SR 2016-17)								
	Desilt	Cum							
	Balaji Layout								
	1st Cross		1	275.00	0.45	1.00	123.75		
	Railwaymens lyout Main Rd		2	252.00	0.45	0.60	136.08		
	1st Cross		2	138.00	0.45	0.60	74.52		
	2nd Cross		2	127.00	0.45	0.60	68.58		
	2nd main		2	58.00	0.45	0.60	31.32		
	Road 1		2	92.00	0.60	0.60	66.24		
	Road 2		2	94.00	0.60	0.60	67.68		
	Cross Road		2	45.00	0.60	0.60	32.40		
							600.57	170.92	**102649.42**
	Basic rate	**82.00**							
	Loading and unloading with 5km lead= 68+2.5x1.28x10 =	**84.00**							
	Area Weightage 6%	**4.92**							
	Final Rate	**170.92**							
2	Providing granite slabs of selected quality roughly dressed havinf a size of 7.5 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete.(5.31.1								
	Drain	Cum							
	Road 1		2	92.00	1.35		248.40		
	Road 2		2	94.00	1.35		253.80		
	Railwaymens lyout Main Rd		2	45.00	1.35		121.50		
	Cross Road		2	45.00	1.35		121.50		
							745.20	665.68	**496064.74**
	Basic rate	**628.00**							
	Area Weightage 6%	**37.68**							
	Final Rate	**665.68**							
3	KSRB 5-11 : Providing and constructing load bearing wall with solid concrete blocks of size 400x200x200 mm having block density not lessthan 1800kg/m3 and having a minimum average compressive strength 4.00 N/mm2 confirming to IS 2185 (Part) : 2005 and constructed with CM 1:4 , as per IS 2572:2005 including cost of all materials, labour charegs, scaffolding, curing complete as per specifications. KBS No.5.4(5.26.1								
	Drain	Cum							
	Damaged Drain Portion in 1st Cross Balaji Layout		2	130.00		1.00	260.00		
							260.00	993.22	**258237.20**
	Basic rate	**937.00**							
	Area Weightage 6%	**56.22**							
	Final Rate	**993.22**							

l. o.	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
4	KSRRB M300-14. Excavation for roadwork in soil with hydraulic excavator of 0.90 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to embankment location and complete as per specifications. MORTH Specification No.301 (P.No.142, I.No.19.14 of PW,P&IWTD S.R 2016-17)								
	Road	Cum							
	1st Cross		1	275.00	6.00	0.23	379.50		
	Railwaymens lyout Main Rd		1	45.00	6.00	0.23	62.10		
	1st Cross		1	138.00	5.50	0.23	174.57		
	Road 1		1	92.00	5.00	0.23	105.80		
	Road 2		1	94.00	5.00	0.23	108.10		
	Cross Road		1	45.00	5.00	0.23	51.75		
							881.82	132.76	**117070.42**
	Basic rate	**46.00**							
	Loading and unloading with 5km lead= 68+2.5x1.28x10 =	**84.00**							
	Area Weightage 6%	**2.76**							
	Final Rate	**132.76**							
5	KSRRB M 400-17, Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechaniqal mix plant carriage ' of mixed Material by tipper to site, laying in uniform layers with paver in sub- base/ base course on well prepared surface and compacting with vibratory roller to achieve the desired density.complete as per specifications. MORTH Specification No. 406 (P.No.157, I.No.20.18 of PW,P&IWTD SR 2016-17)								
	Road	Cum							
	1st Cross		1	275.00	6.00	0.23	379.50		
	Railwaymens lyout Main Rd		1	45.00	6.00	0.23	62.10		
	1st Cross		1	138.00	5.50	0.23	174.57		
	Road 1		1	92.00	5.00	0.23	105.80		
	Road 2		1	94.00	5.00	0.23	108.10		
	Cross Road		1	45.00	5.00	0.23	51.75		
							881.82	1768.08	**1559128.31**
	Basic rate	**1668.00**							
	Area Weightage 6%	**100.08**							
	Final Rate	**1768.08**							
6	KSRRB M 500-6, Providing and applying primer coat with SS bitumen emulsion on prepared surface of granular Base such as WBM WMM including clearing of road surface and spraying primer at the rate of 0.60 kglsqm using mechanical means complete as per specifications. As per MORTH specification clause No. 502 (P.No.160, I.No.21.6 of PW,P&IWTD SR 2016-17)								
	Road	Sqm							
	1st Cross		1	275.00	6.00	--	1650.00		
	Railwaymens lyout Main Rd		1	45.00	6.00	--	270.00		
	1st Cross		1	138.00	5.50	--	759.00		
	Road 1		1	92.00	5.00	--	460.00		
	Road 2		1	94.00	5.00	--	470.00		
	Cross Road		1	45.00	5.00	--	225.00		
							3834.00	27.56	**105665.04**
	Basic rate	**26.00**							
	Area Weightage 6%	**1.56**							
	Final Rate	**27.56**							

Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
KSRRB 500-2: Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatement including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH Spec, Chapter 5 (P.No.160, I.No.21.2 of PW,P&IWTD SR 2016-17)								
Road Formation	Sqm							
Balaji Layout								
1st Cross		1	275.00	6.00	--	1650.00		
Railwaymens lyout Main Rd		1	252.00	5.20	--	1310.40		
1st Cross		1	138.00	5.50	--	759.00		
2nd Cross		1	127.00	5.40	--	685.80		
2nd main		1	58.00	5.20	--	301.60		
Road 1		1	92.00	5.00	--	460.00		
Road 2		1	94.00	5.00	--	470.00		
Cross Road		1	45.00	5.00	--	225.00		
						5861.80	3.18	**18640.52**
Basic rate	**3.00**							
Area Weightage 6%	**0.18**							
Final Rate	**3.18**							
KSRRB M500-7 : Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH / Chapter 5 (P.No.160 I.No.21.7 of PW,P&IWTD SR of 2016-17)								
For Laying BC	Sqm							
Balaji Layout								
1st Cross		1.00	275.00	6.00	--	1650.00		
Railwaymens lyout Main Rd		1.00	252.00	5.20	--	1310.40		
1st Cross		1.00	138.00	5.50	--	759.00		
2nd Cross		1.00	127.00	5.40	--	685.80		
2nd main		1.00	58.00	5.20	--	301.60		
Road 1		1.00	92.00	5.00	--	460.00		
Road 2		1.00	94.00	5.00	--	470.00		
Cross Road		1.00	45.00	5.00	--	225.00		
						5861.80	11.66	**68348.59**
Basic rate	**11.00**							
Area Weightage 6%	**0.66**							
Final Rate	**11.66**							
KSRRB M500-19. Providing and laying bituminous concrete 40 mm compacted thickness with VG30 Bitumen grade using 40-60 HMP using crushed aggregates of grading II, premixed with bituminous binder at 6% of mix and filler, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRT&H specification clause No. 500.9 complete in all respects as per specifications. MORTH Specification No. 509 (P.No.164 of I.No.21.22.6 in PW,P&IWTD S.R 2016-17)								
Road Formation	Cum							
Balaji Layout								
1st Cross		1	275.00	6.00	0.04	66.00		
Railwaymens lyout Main Rd		1	252.00	5.20	0.04	52.42		
1st Cross		1	138.00	5.50	0.04	30.36		
2nd Cross		1	127.00	5.40	0.04	27.43		
2nd main		1	58.00	5.20	0.04	12.06		
Road 1		1	92.00	5.00	0.04	18.40		

Sl. No.	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
	Road 2		1	94.00	5.00	0.04	18.80		
	Cross Road		1	45.00	5.00	0.04	9.00		
							234.47	7083.98	**1660994.96**
	Basic rate	**6683.00**							
	Area Weightage 6%	**400.98**							
	Final Rate	**7083.98**							
10	KSRRB M800-13. Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803.(P.No.197, I.No.24.15 of PW,P&IWTD SR 2016-17)								
	Edge line								
			2	1081.00	0.10	--	216.20		
							216.20	542.72	**117336.06**
	Basic rate	**512.00**							
	Area Weightage 6%	**30.72**							
	Final Rate	**542.72**							
								Total Construction Cost	**4504135.26**
11								**Tender Premium 10%**	**450413.53**
12								**Cost towards Third Party Inspection @ 1%**	**45041.35**
								Sub Total	**4999590.14**
13								**Miscellaneous and rounding off**	**409.86**
								Total	**5000000.00**

Certificate.

1 The workspot was inspected and work is found to be necessary.
2 The area comes within the Bruhat Bangalore Mahanagara Palike limits.
3 The rates adopted based on the PWD SR, Bangalore circle for year 2016-17.
4 The provisions made in the estimate are necessary and essential.

Assistant Engineer

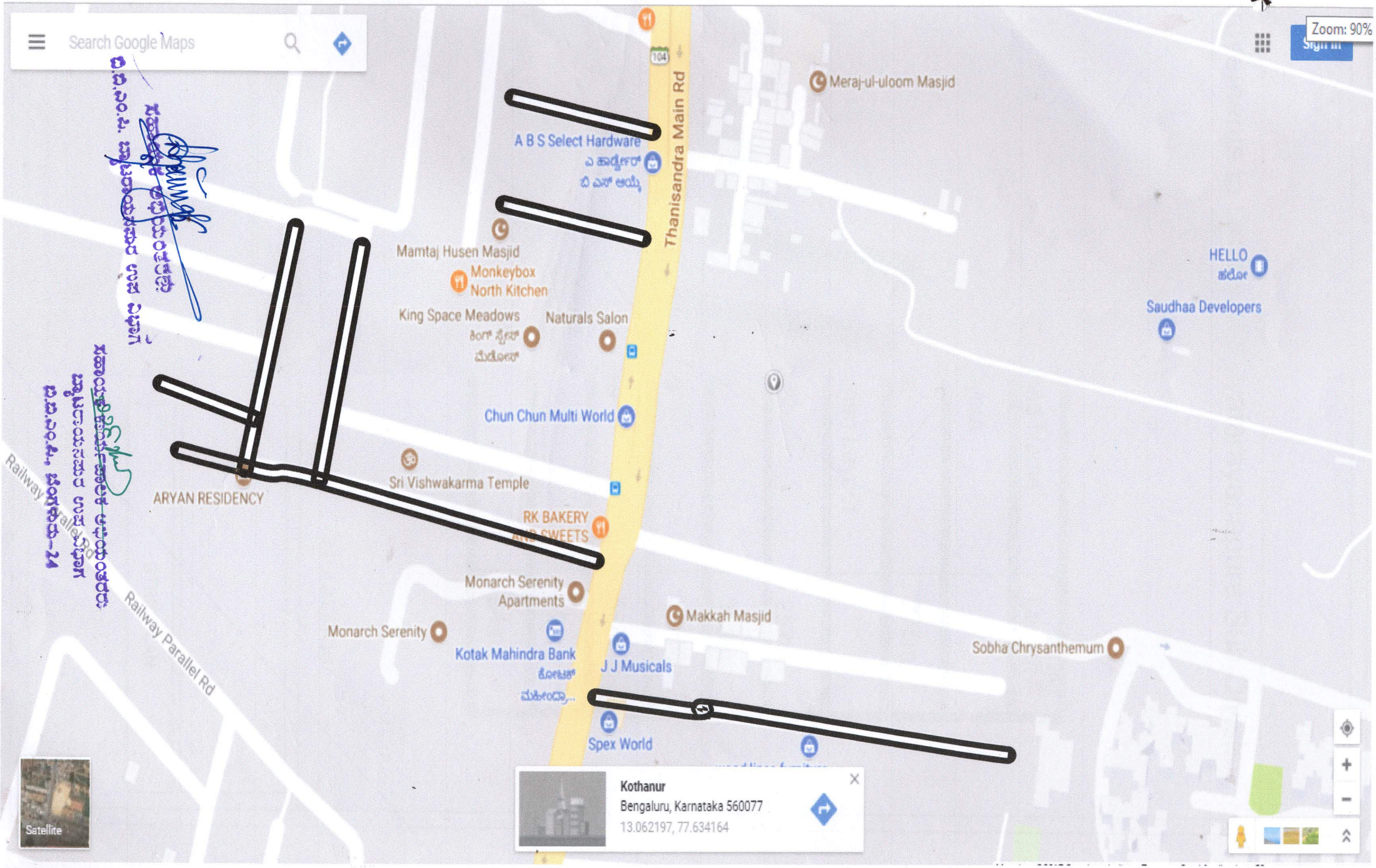
Assistant Executive Engineer

Executive Engineer

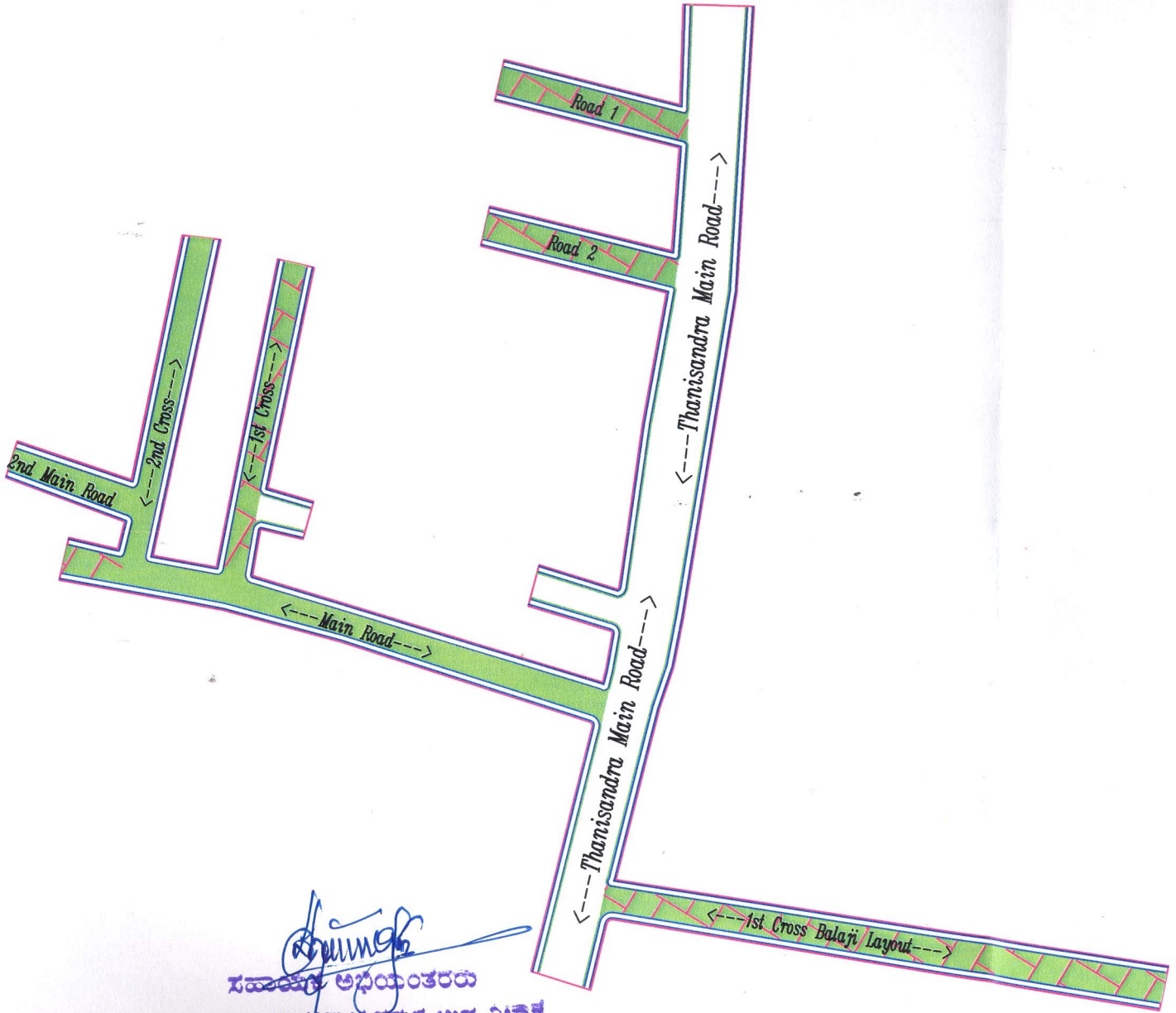
ADMINISTRATIVE APPROVAL
Accorded For Rs. Fifty lakhs only
Head of A/c. P-3111
Div. Ref. No. 103/17-18 Date. 19/12/17
AE 19/12
EE(BTP) 19/12

Technical Sanction
Accorded For 50.00 Lakhs
Head of A/C P3111
CER NO : 471 Dt: 27-12-17
TA CE (YNK)

KEY MAP –BALAJI LAYOUT



vements to Drains and Asphalting to Roads at Balaji Layout Near Railway Gate in Ward No 06 Byatar



Road Na
Balaji Layout
1st Cross
Railway men L
Main Road
2nd Main
1st Cross
2nd Cross
Road 1
Road 2

ಸಹಾಯಕ ಅಭಿಯಂತರರು
ಬಿ.ಬಿ.ಎಂ.ಪಿ. ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-24

EVELS ARE Mts. UNLESS OTHERWISE MENTIONED.

LEGEND:-